

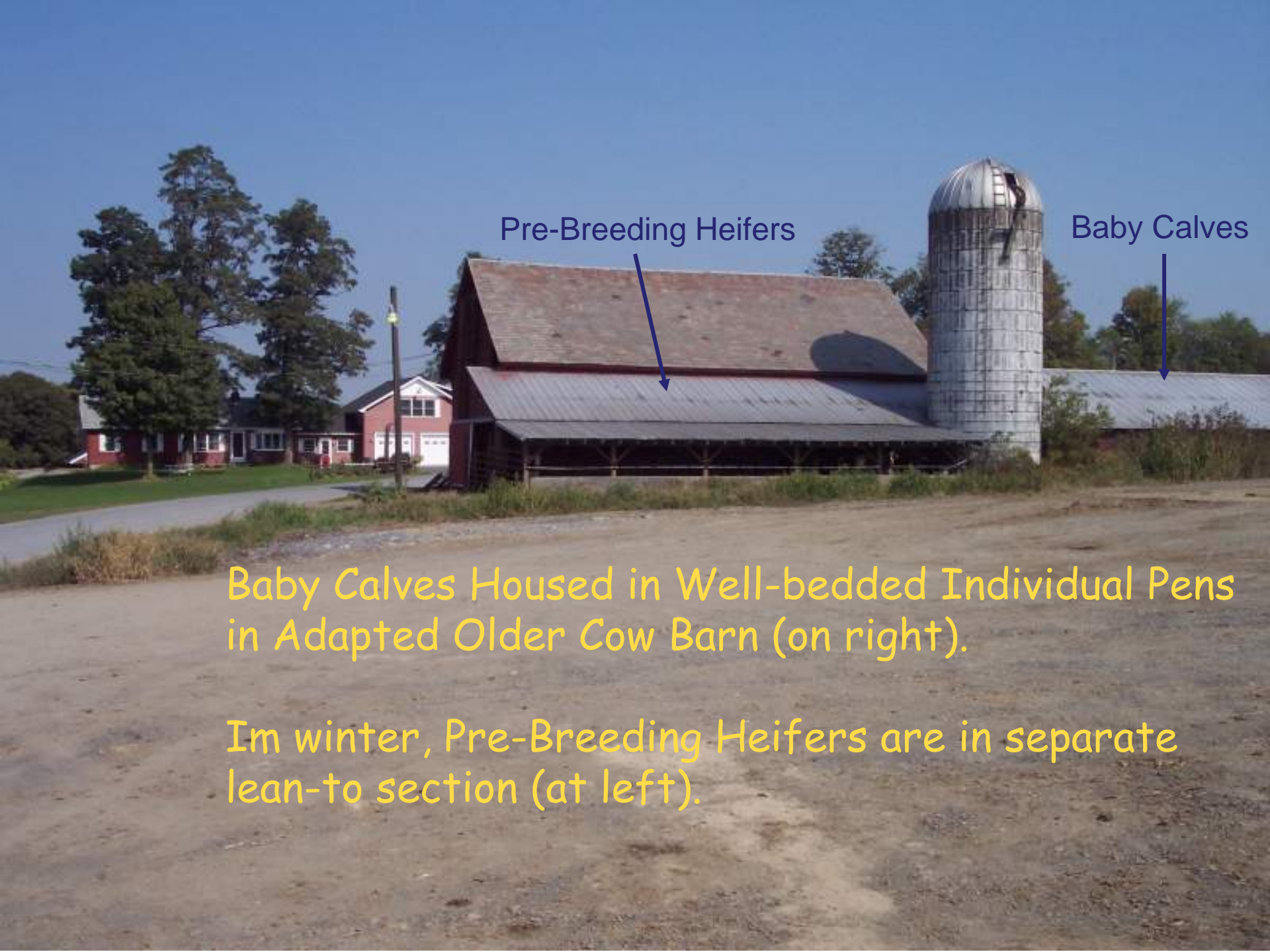
Koval Brothers Dairy, Stillwater, NY

300 Cows
235 Heifers

Adam

Chris





Pre-Breeding Heifers

Baby Calves

Baby Calves Housed in Well-bedded Individual Pens in Adapted Older Cow Barn (on right).

Im winter, Pre-Breeding Heifers are in separate lean-to section (at left).

- ♦ High Quality Colostrum -- huge priority!
 - sound dry program
 - fresh cows milked ASAP
 - cleanliness paramount
 - colostrometer tested, must meet standard
 - fresh only, discard before microbial growth

Newborn Calf "Jug"



Baby Calf Pen

- ♦ High Quality Milk Replacer
 - solids quantity adjusted for weather
 - bucket/bottle cleaning protocols in place to keep them dry and functionally “sterile”
- ♦ Clean Water, High Quality Grain
- ♦ “Walk-through” observation protocol
- ♦ Wean at 7 weeks

Overly Comfortable
Cat



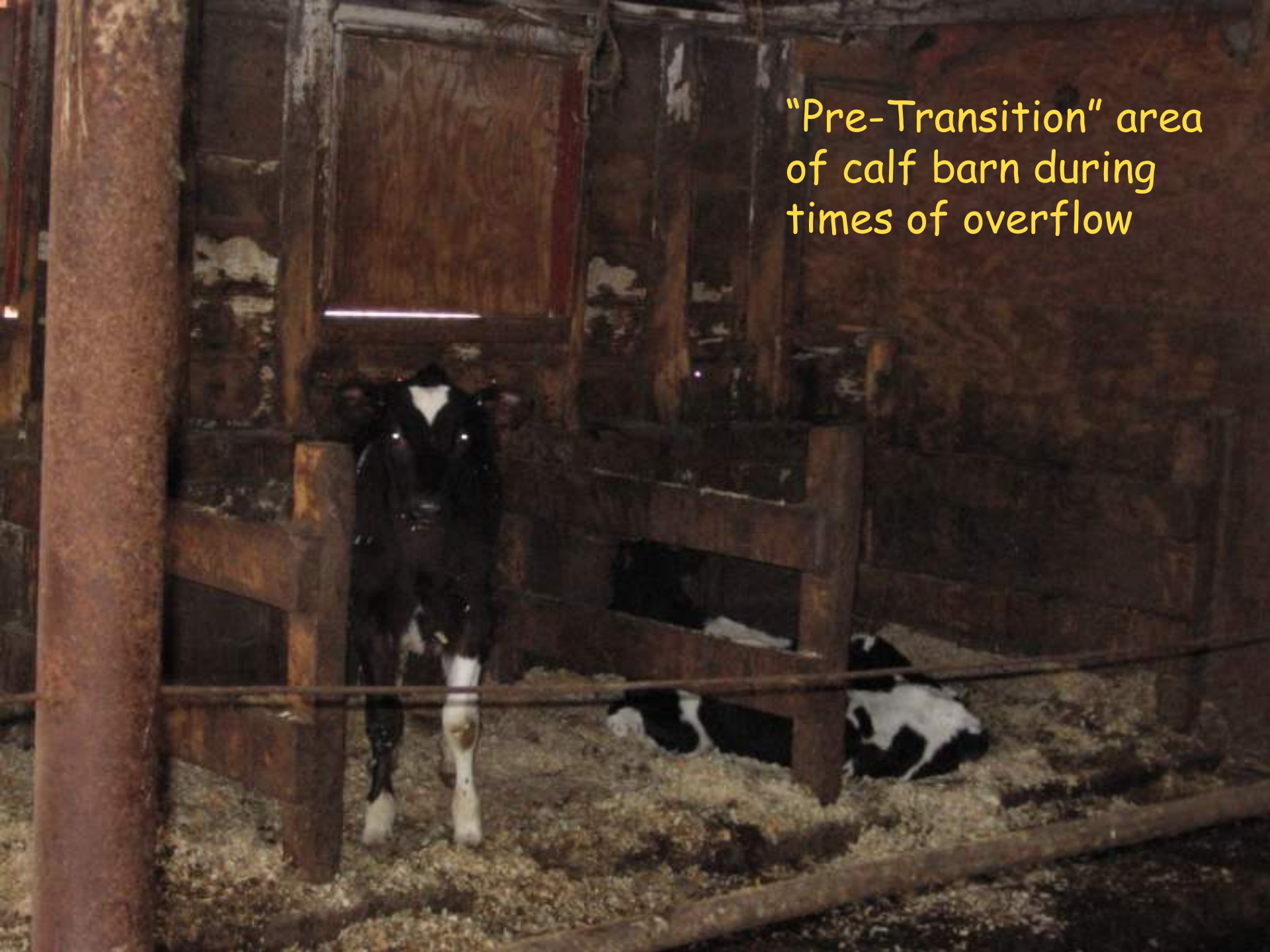
Electronic Scale with Double Gate Cage for Weighing Calves





Hutches are backup
to individual calf pen
overflow.

"Pre-Transition" area
of calf barn during
times of overflow



Transition Barn Built in 2005
Approx. Day 50 → 7 or 8 months
(60⁰ day on 1/8/08!)





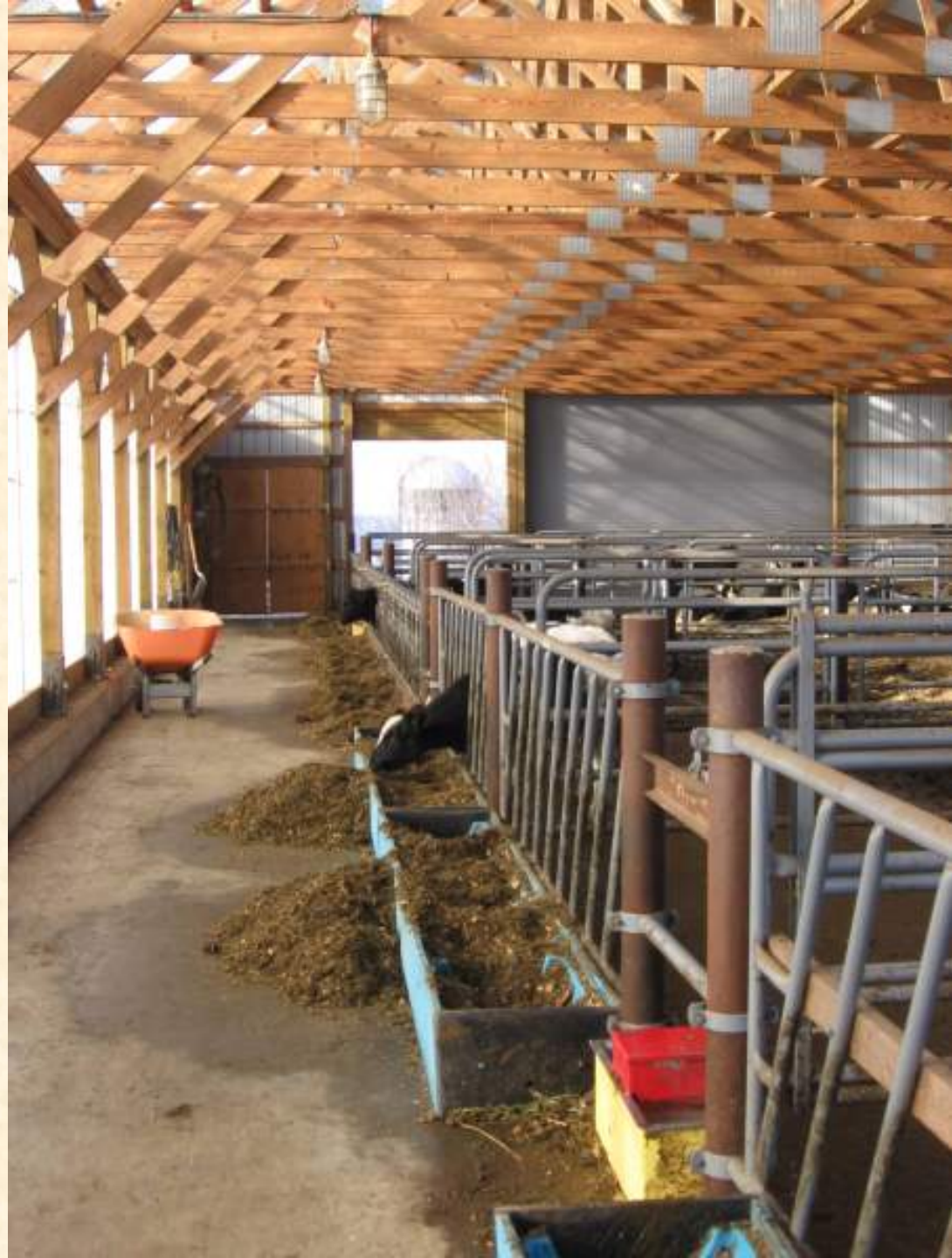
End View - 6 pens of
increasingly larger calves



Clean & Comfortable - Sand Bedding in Summer

All Six Pens get 75% Haylage/25% Corn Silage Mix plus 3.5 lbs. grain.

Some good quality hay to the smallest calves in pens 1 & 2.





Simple, effective curtain system.

Approximately
8 - 10½ months

"Winter Quarters"
Pre-Breeding Group

Summer on Pasture;
Supplemented as
Needed



75% Haylage/25%
Corn Silage Mix plus
2 lbs. grain.





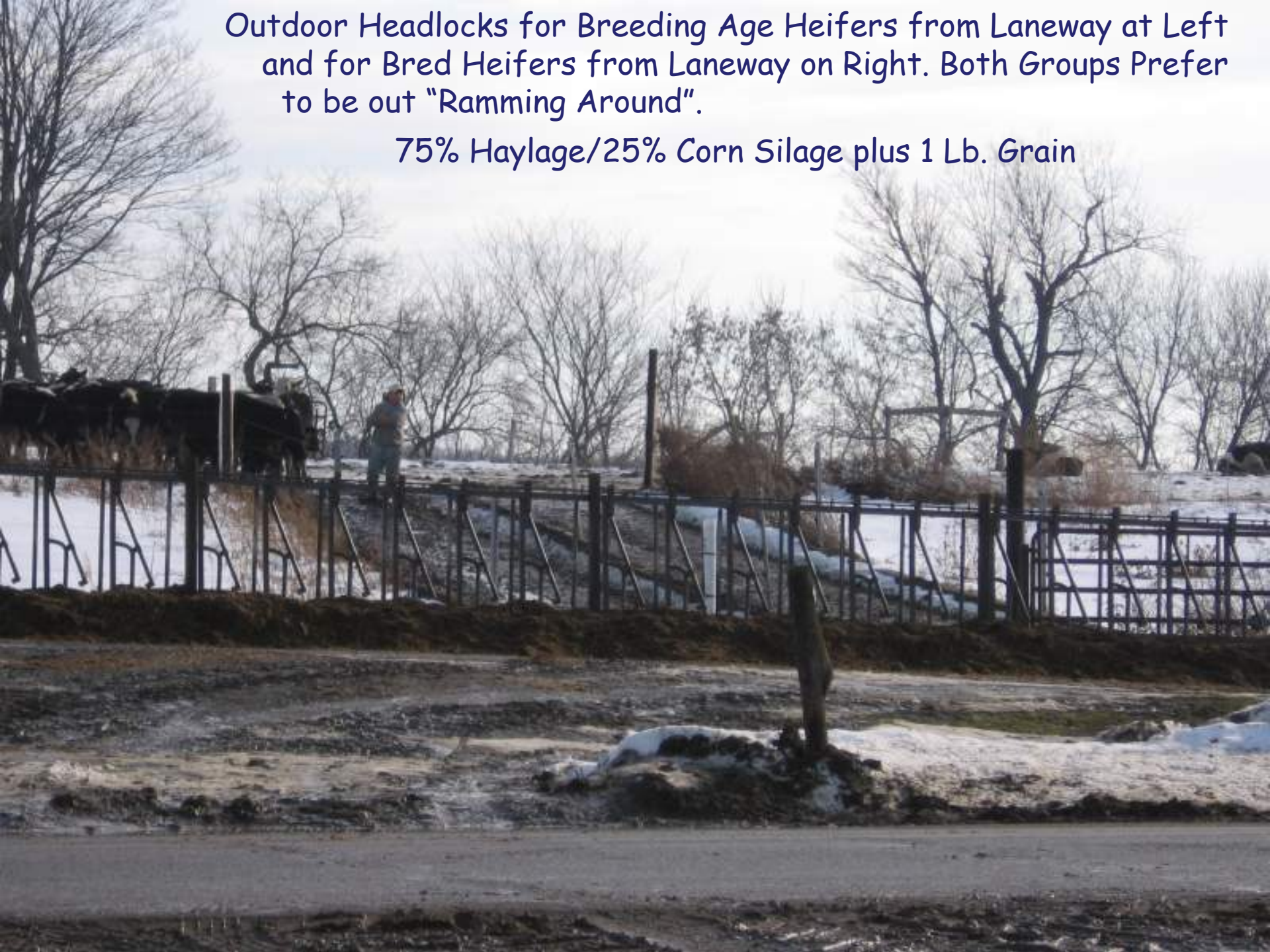
Open to South, Cold Housing, Protected from Wind/Draft *Most* of the Time

"Airy", Clean Bedded Pack
for Breeding Heifer Group



Outdoor Headlocks for Breeding Age Heifers from Laneway at Left
and for Bred Heifers from Laneway on Right. Both Groups Prefer
to be out "Ramming Around".

75% Haylage/25% Corn Silage plus 1 Lb. Grain



Short-bred Heifers on Pasture in Season



"Close-up" Heifers
on Bedded Pack
Behind Bred
Heifers...

...Across from Cow
Barn, Easy to
Observe





Bedded Pack "Around the Corner"

Sun's out, plenty of feed, room
to ram, clean and dry place to
lie...

Life is Good!



Questions



Koval

Breakdown of Costs of Raising Heifers by Stage of Growth Koval				
Per Pound of Gain	Stage of Growth			
	Birth to 200 Lbs	201 to 700 Lbs	701 to 850 Lbs	851 to Calving
Feed	\$1.003	\$0.472	\$0.791	\$0.790
Labor	\$1.045	\$0.169	\$0.177	\$0.091
All Other Costs	\$0.633	\$0.477	\$0.804	\$0.413
Total	\$2.681	\$1.118	\$1.773	\$1.295
By Total Investment	Stage of Growth			
	Birth to 200 Lbs	201 to 700 Lbs	701 to 850 Lbs	851 to Calving
Feed	\$110.3	\$236.2	\$118.7	\$355.6
Labor	\$115.0	\$84.3	\$26.6	\$40.9
All Other Costs	\$69.6	\$238.3	\$120.6	\$186.0
Total	\$294.9	\$558.8	\$265.9	\$582.5
% of Total Costs	15.8%	30.0%	14.3%	31.2%
% of Total Growth	8%	38%	12%	35%

Koval

PRO-DAIRY

PRO-DAIRY

Age Leaving Replacement Program	24.0	Months
Weight Leaving Replacement Program	1317	Lbs.
Average Daily Rate of Gain	1.69	Lbs.
All Heifers per Labor Hour, On Farm Only	33.10	
Pre-Weaned Heifers per Labor Hour	6.22	
Post Weaned Heifers per Labor Hour	54.6	
Total Investment in Animal	\$1,907.00	
% Dairy Replacement Cull Rate	5.02%	
% Non-Completion Rate, Based on Animals Entering System	9.55%	

Koval

	Average Cost		Per Animal	Percent
	Per day per Animal	Per Pound of Gain	Completing Program 103.9 wks	
Feed	\$1.150	\$0.681	\$835.85	47.6%
Labor	\$0.381	\$0.226	\$276.77	15.8%
Bedding	\$0.088	\$0.052	\$63.99	3.6%
Health	\$0.036	\$0.021	\$26.33	1.5%
Breeding	\$0.094	\$0.056	\$68.24	3.9%
Trucking	\$0.005	\$0.003	\$3.75	0.2%
Insurance	\$0.008	\$0.004	\$5.50	0.3%
Machinery Operation	\$0.093	\$0.055	\$67.67	3.9%
Machinery Ownership	\$0.029	\$0.017	\$21.28	1.2%
Building Operation	\$0.038	\$0.022	\$27.40	1.6%
Building Ownership	\$0.168	\$0.100	\$122.15	7.0%
Manure Storage Operation	\$0.000	\$0.000	\$0.00	0.0%
Manure Storage Ownership	\$0.000	\$0.000	\$0.00	0.0%
Manure Spreading	\$0.053	\$0.032	\$38.77	2.2%
Custom Boarding	\$0.000	\$0.000	\$0.00	0.0%
Professional Services & Fees	\$0.000	\$0.000	\$0.00	0.0%
Non-Performance Expense	\$0.070	\$0.041	\$50.91	2.9%
Interest on Daily Investment	\$0.204	\$0.121	\$148.41	8.4%
Total	\$2.417	\$1.432	\$1,757.00	100.0%

PRO-DAIRY

PRO-DAIRY

Health Program

Koval 07

PRO-DAIRY

PRO

	Per Animal per Day	Per Pound of Gain	Per Animal
Group 1			
Preventative	\$0.23	\$0.13	\$12.50
Treatment	\$0.07	\$0.04	\$3.78
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.30	\$0.16	\$16.28

Group 2			
Preventative	\$0.02	\$0.01	\$3.93
Treatment	\$0.02	\$0.01	\$3.85
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.05	\$0.02	\$7.78

Group 3			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Group 4			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Group 5			
Preventative	\$0.01	\$0.01	\$2.27
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.01	\$0.01	\$2.27

Group 6			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

	Per Animal per Day	Per Pound of Gain	Per Animal
Group 7			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Group 8			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Group 9			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

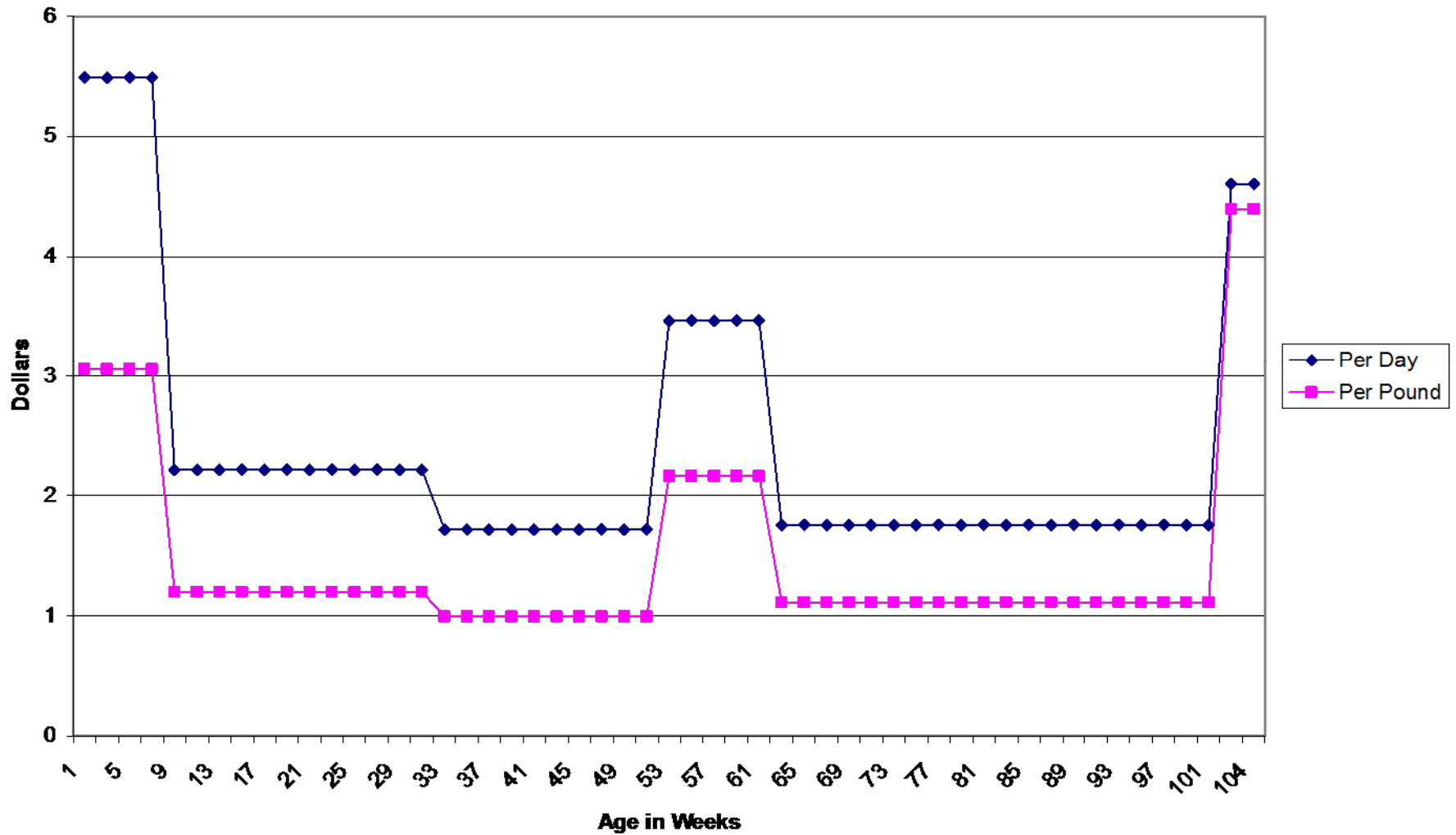
Group 10			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Group 11			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

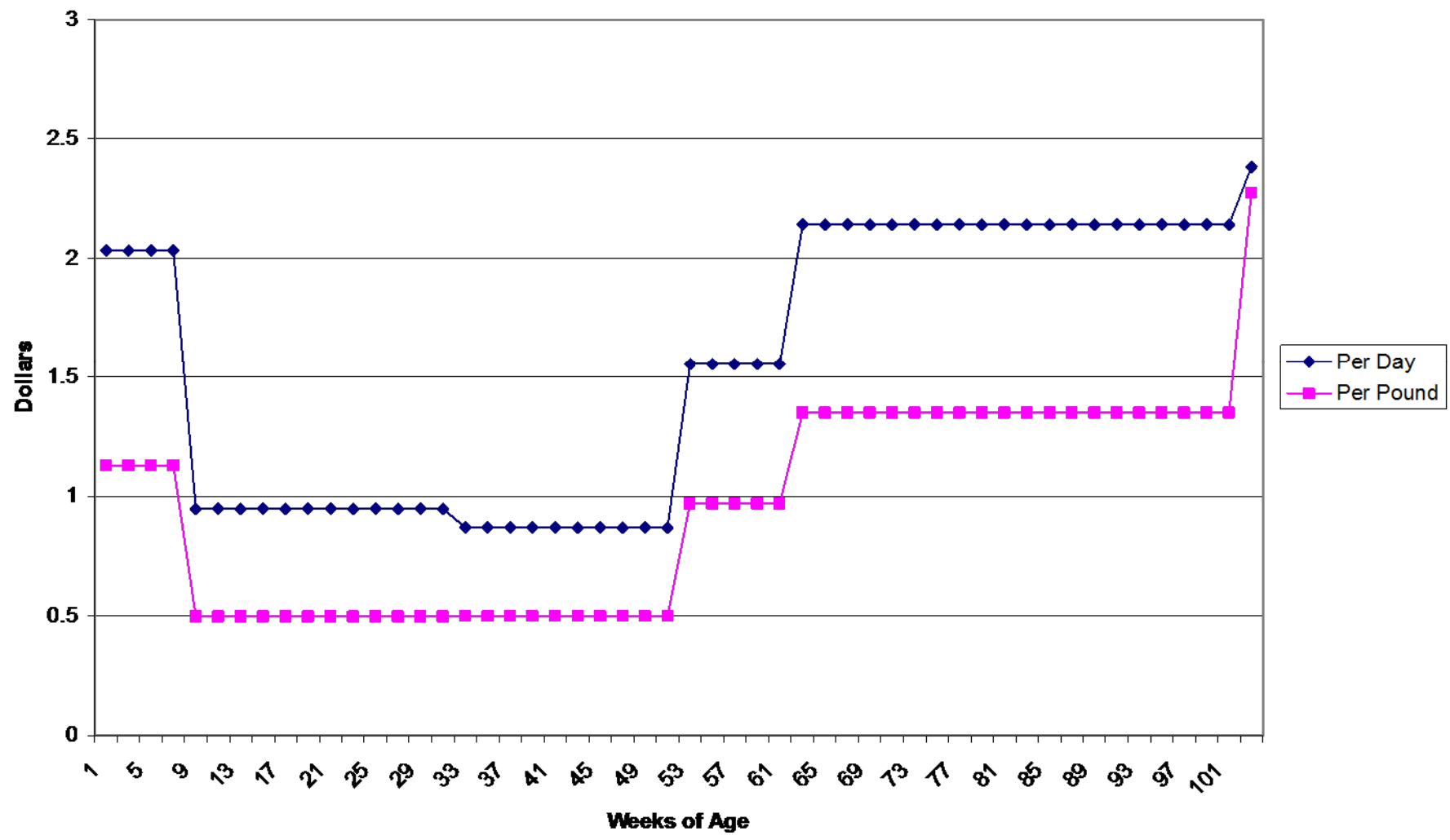
Group 12			
Preventative	\$0.00	\$0.00	\$0.00
Treatment	\$0.00	\$0.00	\$0.00
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$0.00	\$0.00

Summary			
All Groups	Per Animal per Day	Per Pound of Gain	Per Animal
Preventative	\$0.03	\$0.02	\$18.70
Treatment	\$0.01	\$0.01	\$7.63
Veterinary	\$0.00	\$0.00	\$0.00
Total	\$0.04	\$0.02	\$26.33

Koval Brothers Dairy Total Heifer Raising Costs



Koval Brothers Dairy Heifer Feed Costs, Off Pasture



Questions

